

Sequence Listing

<110> Baker, Kevin
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 Filvaroff, Ellen
 Gerritsen, Mary
 Goddard, Audrey
 Godowski, Paul
 Grimaldi, Christopher
 Gurney, Austin
 Hillan, Kenneth
 Kljavin, Ivar
 Napier, Mary
 Roy, Margaret
 Tumas, Daniel
 Wood, William

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 gtagtacatg gtggataact tctactttta ggaggactac tctcttctga 200

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 gatgatgatg atgatgatga tgatgatgat gatgaggaca actctctttt 400

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 35 40 45
 Asp Asp Asp Asp Asp Glu Asp Asn Ser Leu Phe Pro Thr Arg Glu
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 Pro Arg Ser His Phe Phe Pro Phe Asp Leu Phe Pro Met Cys Pro
 65 70 75
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 80 85 90
 Gly Leu Thr Ser Val Pro Thr Asn Ile Pro Phe Asp Thr Arg Met
 95 100 105
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 110 115 120
 Phe Lys Gly Leu Thr Ser Leu Tyr Gly Leu Ile Leu Asn Asn Asn
 125 130 135
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 140 145 150
 Leu Arg Arg Leu Tyr Leu Ser His Asn Gln Leu Ser Glu Ile Pro
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 170 175 180
 Lys Val Lys Lys Ile Gln Lys Asp Thr Phe Lys Gly Met Asn Ala
 185 190 195
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Thr	Leu	Leu	Glu	Leu	His	Leu	Asp	Tyr	Asn	Lys	Ile	Ser	Thr	Val	245	250	255
Glu	Leu	Glu	Asp	Phe	Lys	Arg	Tyr	Lys	Glu	Leu	Gln	Arg	Leu	Gly	260	265	270
Leu	Gly	Asn	Asn	Lys	Ile	Thr	Asp	Ile	Glu	Asn	Gly	Ser	Leu	Ala	275	280	285
Asn	Ile	Pro	Arg	Val	Arg	Glu	Ile	His	Leu	Glu	Asn	Asn	Lys	Leu	290	295	300
Lys	Lys	Ile	Pro	Ser	Gly	Leu	Pro	Glu	Leu	Lys	Tyr	Leu	Gln	Ile	305	310	315
Ile	Phe	Leu	His	Ser	Asn	Ser	Ile	Ala	Arg	Val	Gly	Val	Asn	Asp	320	325	330
Phe	Cys	Pro	Thr	Val	Pro	Lys	Met	Lys	Lys	Ser	Leu	Tyr	Ser	Ala	335	340	345
Ile	Ser	Leu	Phe	Asn	Asn	Pro	Val	Lys	Tyr	Trp	Glu	Met	Gln	Pro	350	355	360
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Pro	Leu	Ile	Arg	His	Arg	Ala	Leu	Ala	Ala	Glu	Thr	Phe	Ser	Ala	
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Gln	Val	Pro	Leu	Arg	Leu	Gln	Ile	Leu	His	Gln	Gly	Gln	Leu	Leu	
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Arg	Glu	Leu	Gln	Ala	Asn	Val	Ser	Ala	Gln	Glu	Pro	Gly	Phe	Ala	
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Thr Gly Ala Ala	Gly Ser Ala Ser Leu Thr	Leu Leu Gly Asn Gly			
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Ser Leu Ile Tyr	Gln Val Gln Val Val	Gly Thr Ser Ser Glu Val			
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Val Ala Met Thr	Leu Glu Thr Lys Pro	Gln Arg Arg Asp Gln Arg			
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Thr Val Leu Cys	His Met Ala Gly Leu	Gln Pro Gly Gly His Thr			
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Ala Val Gly Ile	Cys Pro Gly Leu Gly	Ala Arg Gly Ala His Met			
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Gly His Ser Ala	Arg His Asp Thr Leu	Pro Val Pro Leu Ala Gly			
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Ala Leu Val Leu	Pro Pro Val Lys Ser	Gln Ala Ala Gly His Ala			
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Trp Leu Ser Leu	Asp Thr His Cys His	Leu His Tyr Glu Val Leu			
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Gly Phe Tyr Gly	Ser Glu Ala Gln Gly	Val Val Lys Asp Leu Glu			
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Pro Glu Leu Leu	Arg His Leu Ala Lys	Gly Met Ala Ser Leu Met			
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Ile Thr Thr Lys	Gly Ser Pro Arg Gly	Glu Leu Arg Gly Gln Val			
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His Ile Ala Asn	Gln Cys Glu Val Gly	Gly Leu Arg Leu Glu Ala			
	650		655		660

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Ser	Ala	Ala	Pro	Pro	Val	Val	Pro	Gly	Leu	Pro	Ala	Leu	Ala	Pro	
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Ala	Lys	Pro	Gly	Gly	Pro	Gly	Arg	Pro	Arg	Asp	Pro	Asn	Thr	Cys	
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Phe	Phe	Glu	Gly	Gln	Gln	Arg	Pro	His	Gly	Ala	Arg	Trp	Ala	Pro	
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Asn	Tyr	Asp	Pro	Leu	Cys	Ser	Leu	Cys	Thr	Cys	Gln	Arg	Arg	Thr	
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Val	Asn	Pro	Thr	Asp	Cys	Cys	Lys	Gln	Cys	Pro	Val	Gly	Ser	Gly	
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Ala	His	Pro	Gln	Leu	Gly	Asp	Pro	Met	Gln	Ala	Asp	Gly	Pro	Arg	
				860					865					870	
Gly	Cys	Arg	Phe	Ala	Gly	Gln	Trp	Phe	Pro	Glu	Ser	Gln	Ser	Trp	
				875					880					885	
His	Pro	Ser	Val	Pro	Pro	Phe	Gly	Glu	Met	Ser	Cys	Ile	Thr	Cys	
				890					895					900	
Arg	Cys	Gly	Ala	Gly	Val	Pro	His	Cys	Glu	Arg	Asp	Asp	Cys	Ser	
				905					910					915	
Leu	Pro	Leu	Ser	Cys	Gly	Ser	Gly	Lys	Glu	Ser	Arg	Cys	Cys	Ser	
				920					925					930	
Arg	Cys	Thr	Ala	His	Arg	Arg	Pro	Pro	Glu	Thr	Arg	Thr	Asp	Pro	
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Glu	Leu	Glu	Lys	Glu	Ala	Glu	Gly	Ser							

<210> 8
 <211> 44
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic Oligonucleotide probe

 <400> 8
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 <210> 9
 <211> 28
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 9
 cggacgcgtg gggcctgcgc acccagct 28

 <210> 10
 <211> 36
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 10
 gccgctcccc gaacgggcag cggctccttc tcagaa 36

 <210> 11
 <211> 36
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 11
 ggcgcacagc acgcagcgca tcaccccgaa tggctc 36

 <210> 12
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic Oligonucleotide Probe

 <400> 12
 gtgctgccca tccgttctga gaagga 26

 <210> 13

<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 13
gcagggtgct caaacaggac ac 22

<210> 14
<211> 3231
<212> DNA
<213> Homo Sapien

<400> 14
ggcggagcag ccctagccgc caccgtcgct ctgcgagctc tcgtcgccac 50
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tgcccgcgct ggccctgctg ctgctgctgc tcggagcggg gccccgaggc 200
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 tgagttgttt gttgctaaga ggtagtaaat gtaagagagt actggttcct 3100
 tcagtagtga gtattttctca tagtgcagct ttattttatct ccaggatgtt 3150
 tttgtggctg tatttgattg atatgtgctt cttctgattc ttgctaattt 3200
 ccaaccatat tgaataaatg tgatcaagtc a 3231

<210> 15

<211> 737

<212> PRT

<213> Homo Sapien

<400> 15

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Ala	Leu	Ala	Leu	Leu	Leu	Leu	Leu	Leu	Gly	Ala	Gly	Pro	Arg	Gly
				20					25					30
Ser	Ser	Leu	Ala	Asn	Pro	Val	Pro	Ala	Ala	Pro	Leu	Ser	Ala	Pro
				35					40					45
Gly	Pro	Cys	Ala	Ala	Gln	Pro	Cys	Arg	Asn	Gly	Gly	Val	Cys	Thr
				50					55					60
Ser	Arg	Pro	Glu	Pro	Asp	Pro	Gln	His	Pro	Ala	Pro	Ala	Gly	Glu
				65					70					75
Pro	Gly	Tyr	Ser	Cys	Thr	Cys	Pro	Ala	Gly	Ile	Ser	Gly	Ala	Asn
				80					85					90
Cys	Gln	Leu	Val	Ala	Asp	Pro	Cys	Ala	Ser	Asn	Pro	Cys	His	His
				95					100					105
Gly	Asn	Cys	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asp	Gly	Tyr	Leu

110	115	120
Cys Ile Cys Asn Glu Gly Tyr Glu Gly	Pro Asn Cys Glu Gln Ala	
125	130	135
Leu Pro Ser Leu Pro Ala Thr Gly Trp	Thr Glu Ser Met Ala Pro	
140	145	150
Arg Gln Leu Gln Pro Val Pro Ala Thr	Gln Glu Pro Asp Lys Ile	
155	160	165
Leu Pro Arg Ser Gln Ala Thr Val Thr	Leu Pro Thr Trp Gln Pro	
170	175	180
Lys Thr Gly Gln Lys Val Val Glu Met	Lys Trp Asp Gln Val Glu	
185	190	195
Val Ile Pro Asp Ile Ala Cys Gly Asn	Ala Ser Ser Asn Ser Ser	
200	205	210
Ala Gly Gly Arg Leu Val Ser Phe Glu	Val Pro Gln Asn Thr Ser	
215	220	225
Val Lys Ile Arg Gln Asp Ala Thr Ala	Ser Leu Ile Leu Leu Trp	
230	235	240
Lys Val Thr Ala Thr Gly Phe Gln Gln	Cys Ser Leu Ile Asp Gly	
245	250	255
Arg Ser Val Thr Pro Leu Gln Ala Ser	Gly Gly Leu Val Leu Leu	
260	265	270
Glu Glu Met Leu Ala Leu Gly Asn Asn	His Phe Ile Gly Phe Val	
275	280	285
Asn Asp Ser Val Thr Lys Ser Ile Val	Ala Leu Arg Leu Thr Leu	
290	295	300
Val Val Lys Val Ser Thr Cys Val Pro	Gly Glu Ser His Ala Asn	
305	310	315
Asp Leu Glu Cys Ser Gly Lys Gly Lys	Cys Thr Thr Lys Pro Ser	
320	325	330
Glu Ala Thr Phe Ser Cys Thr Cys Glu	Glu Gln Tyr Val Gly Thr	
335	340	345
Phe Cys Glu Glu Tyr Asp Ala Cys Gln	Arg Lys Pro Cys Gln Asn	
350	355	360
Asn Ala Ser Cys Ile Asp Ala Asn Glu	Lys Gln Asp Gly Ser Asn	
365	370	375
Phe Thr Cys Val Cys Leu Pro Gly Tyr	Thr Gly Glu Leu Cys Gln	
380	385	390
Ser Lys Ile Asp Tyr Cys Ile Leu Asp	Pro Cys Arg Asn Gly Ala	
395	400	405

Thr	Cys	Ile	Ser	Ser	Leu	Ser	Gly	Phe	Thr	Cys	Gln	Cys	Pro	Glu	410	415	420
Gly	Tyr	Phe	Gly	Ser	Ala	Cys	Glu	Glu	Lys	Val	Asp	Pro	Cys	Ala	425	430	435
Ser	Ser	Pro	Cys	Gln	Asn	Asn	Gly	Thr	Cys	Tyr	Val	Asp	Gly	Val	440	445	450
His	Phe	Thr	Cys	Asn	Cys	Ser	Pro	Gly	Phe	Thr	Gly	Pro	Thr	Cys	455	460	465
Ala	Gln	Leu	Ile	Asp	Phe	Cys	Ala	Leu	Ser	Pro	Cys	Ala	His	Gly	470	475	480
Thr	Cys	Arg	Ser	Val	Gly	Thr	Ser	Tyr	Lys	Cys	Leu	Cys	Asp	Pro	485	490	495
Gly	Tyr	His	Gly	Leu	Tyr	Cys	Glu	Glu	Glu	Tyr	Asn	Glu	Cys	Leu	500	505	510
Ser	Ala	Pro	Cys	Leu	Asn	Ala	Ala	Thr	Cys	Arg	Asp	Leu	Val	Asn	515	520	525
Gly	Tyr	Glu	Cys	Val	Cys	Leu	Ala	Glu	Tyr	Lys	Gly	Thr	His	Cys	530	535	540
Glu	Leu	Tyr	Lys	Asp	Pro	Cys	Ala	Asn	Val	Ser	Cys	Leu	Asn	Gly	545	550	555
Ala	Thr	Cys	Asp	Ser	Asp	Gly	Leu	Asn	Gly	Thr	Cys	Ile	Cys	Ala	560	565	570
Pro	Gly	Phe	Thr	Gly	Glu	Glu	Cys	Asp	Ile	Asp	Ile	Asn	Glu	Cys	575	580	585
Asp	Ser	Asn	Pro	Cys	His	His	Gly	Gly	Ser	Cys	Leu	Asp	Gln	Pro	590	595	600
Asn	Gly	Tyr	Asn	Cys	His	Cys	Pro	His	Gly	Trp	Val	Gly	Ala	Asn	605	610	615
Cys	Glu	Ile	His	Leu	Gln	Trp	Lys	Ser	Gly	His	Met	Ala	Glu	Ser	620	625	630
Leu	Thr	Asn	Met	Pro	Arg	His	Ser	Leu	Tyr	Ile	Ile	Ile	Gly	Ala	635	640	645
Leu	Cys	Val	Ala	Phe	Ile	Leu	Met	Leu	Ile	Ile	Leu	Ile	Val	Gly	650	655	660
Ile	Cys	Arg	Ile	Ser	Arg	Ile	Glu	Tyr	Gln	Gly	Ser	Ser	Arg	Pro	665	670	675
Ala	Tyr	Glu	Glu	Phe	Tyr	Asn	Cys	Arg	Ser	Ile	Asp	Ser	Glu	Phe	680	685	690
Ser	Asn	Ala	Ile	Ala	Ser	Ile	Arg	His	Ala	Arg	Phe	Gly	Lys	Lys			

695	700	705
Ser Arg Pro Ala Met Tyr Asp Val Ser Pro Ile Ala Tyr Glu Asp		
710	715	720
Tyr Ser Pro Asp Asp Lys Pro Leu Val Thr Leu Ile Lys Thr Lys		
725	730	735

Asp Leu

<210> 16
 <211> 43
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Oligonucleotide Probe

<400> 16
 tgtaaaacga cggccagtta aatagacctg caattattaa tct 43

<210> 17
 <211> 41
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Oligonucleotide Probe

<400> 17
 caggaaacag ctatgaccac ctgcacacct gcaaaccat t 41

<210> 18
 <211> 508
 <212> DNA
 <213> Homo Sapien

<400> 18
 ctctggaagg tcacggccac aggattccaa cagtgcctccc tcatagatgg 50
 acgaaagtgt gacccccctt tcaggctttc aggggggactg gtccctcttg 100
 aggagatgct cgccttgggg aataatcact ttattgggtt tgtgaatgat 150
 tctgtgacta agtctattgt ggctttgcgc ttaactctgg tggatgaagg 200
 cagcacctgt gtgccggggg agagtcacgc aaatgacttg gagggttcag 250
 gaaaaggaaa atgcaccacg aagccgtcag aggcaacttt ttccctgtacc 300
 tgtgaggagc agtacgtggg tactttctgt gaagaatacg atgcttgcca 350
 gaggaacact tgccaaaaca acgcgagctg tattgatgca aatgaaaagc 400
 aagatgggag caatttcacc tgtgtttgcc ttccctgggtta tactggagag 450
 ctttgccaac cgaactgaga ttggagcgaa cgacctacac cgaactgaga 500

taggggag 508

<210> 19
<211> 508
<212> DNA
<213> Homo Sapien

<400> 19
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acgaaagtgt gacccccctt tcaggctttc agggggactg gtcctcctgg 100
aggagatgct cgccttgagg aataatcact ttattggttt tgtgaatgat 150
tctgtgacta agtctattgt ggctttgcgc ttaactctgg tgggaagggt 200
cagcacctgt gtgccggggg agagtcacgc aaatgacttg gagtgttcag 250
gaaaaggaaa atgcaccacg aagccgtcag aggcaacttt ttcctgtacc 300
tgtgaggagc agtacgtggg tactttctgt gaagaatacg atgcttgcca 350
gaggaaacct tgccaaaaca acgcgagctg tattgatgca aatgaaaagc 400
aagatgggag caatttcacc tgtgtttgcc ttctgggta tactggagag 450
ctttgccaac cgaactgaga ttggagcgaa cgacctacac cgaactgaga 500

taggggag 508

<210> 20
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 20
ctctggaagg tcacggccac agg 23

<210> 21
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 21
ctcagttcgg ttggcaaagc tctc 24

<210> 22
<211> 69
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 22

cagtgtctccc tcatagatgg acgaaagtgt gacccccctt tcaggcgaga 50

gcttttgcaa ccgaactga 69

<210> 23

<211> 1520

<212> DNA

<213> Homo Sapien

<400> 23

gctgagtcgt ctgtctctgc tgctgctgct ccagcctgta acctgtgcct 50

acaccacgcc agggcccccc agagccctca ccacgctggg cggccccaga 100

gcccacacca tgccgggcac ctacgtctcc tcgaccacac tcagtagtcc 150

cagcaccag ggcctgcaag agcaggcacg ggcctgatg cgggacttcc 200

cgctcgtgga cggccacaac gacctgcccc tggctctaag gcaggtttac 250

cagaaagggc tacaggatgt taacctgcgc aatttcagct acggccagac 300

cagcctggac aggcttagag atggcctcgt gggcgcccag ttctggtcag 350

cctatgtgcc atgccagacc caggaccggg atgcctgcg cctcacctg 400

gagcagattg acctcatacg ccgcatgtgt gcctcctatt ctgagctgga 450

gcttgtgacc tcggctaaag ctctgaacga cactcagaaa ttggcctgcc 500

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 aataaatggt ttggacatag 1520

<210> 24

<211> 433

<212> PRT

<213> Homo Sapien

<400> 24

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Pro	Leu	Val	Asp	Gly	His	Asn	Asp	Leu	Pro	Leu	Val	Leu	Arg	Gln	35	40	45	
Val	Tyr	Gln	Lys	Gly	Leu	Gln	Asp	Val	Asn	Leu	Arg	Asn	Phe	Ser	50	55	60	
Tyr	Gly	Gln	Thr	Ser	Leu	Asp	Arg	Leu	Arg	Asp	Gly	Leu	Val	Gly	65	70	75	
Ala	Gln	Phe	Trp	Ser	Ala	Tyr	Val	Pro	Cys	Gln	Thr	Gln	Asp	Arg	80	85	90	
Asp	Ala	Leu	Arg	Leu	Thr	Leu	Glu	Gln	Ile	Asp	Leu	Ile	Arg	Arg	95	100	105	
Met	Cys	Ala	Ser	Tyr	Ser	Glu	Leu	Glu	Leu	Val	Thr	Ser	Ala	Lys	110	115	120	
Ala	Leu	Asn	Asp	Thr	Gln	Lys	Leu	Ala	Cys	Leu	Ile	Gly	Val	Glu	125	130	135	
Gly	Gly	His	Ser	Leu	Asp	Asn	Ser	Leu	Ser	Ile	Leu	Arg	Thr	Phe	140	145	150	
Tyr	Met	Leu	Gly	Val	Arg	Tyr	Leu	Thr	Leu	Thr	His	Thr	Cys	Asn	155	160	165	
Thr	Pro	Trp	Ala	Glu	Ser	Ser	Ala	Lys	Gly	Val	His	Ser	Phe	Tyr	170	175	180	

Asn	Asn	Ile	Ser	Gly	Leu	Thr	Asp	Phe	Gly	Glu	Lys	Val	Val	Ala	185	190	195
Glu	Met	Asn	Arg	Leu	Gly	Met	Met	Val	Asp	Leu	Ser	His	Val	Ser	200	205	210
Asp	Ala	Val	Ala	Arg	Arg	Ala	Leu	Glu	Val	Ser	Gln	Ala	Pro	Val	215	220	225
Ile	Phe	Ser	His	Ser	Ala	Ala	Arg	Gly	Val	Cys	Asn	Ser	Ala	Arg	230	235	240
Asn	Val	Pro	Asp	Asp	Ile	Leu	Gln	Leu	Leu	Lys	Lys	Asn	Gly	Gly	245	250	255
Val	Val	Met	Val	Ser	Leu	Ser	Met	Gly	Val	Ile	Gln	Cys	Asn	Pro	260	265	270
Ser	Ala	Asn	Val	Ser	Thr	Val	Ala	Asp	His	Phe	Asp	His	Ile	Lys	275	280	285
Ala	Val	Ile	Gly	Ser	Lys	Phe	Ile	Gly	Ile	Gly	Gly	Asp	Tyr	Asp	290	295	300
Gly	Ala	Gly	Lys	Phe	Pro	Gln	Gly	Leu	Glu	Asp	Val	Ser	Thr	Tyr	305	310	315
Pro	Val	Leu	Ile	Glu	Glu	Leu	Leu	Ser	Arg	Gly	Trp	Ser	Glu	Glu	320	325	330
Glu	Leu	Gln	Gly	Val	Leu	Arg	Gly	Asn	Leu	Leu	Arg	Val	Phe	Arg	335	340	345
Gln	Val	Glu	Lys	Val	Gln	Glu	Glu	Asn	Lys	Trp	Gln	Ser	Pro	Leu	350	355	360
Glu	Asp	Lys	Phe	Pro	Asp	Glu	Gln	Leu	Ser	Ser	Ser	Cys	His	Ser	365	370	375
Asp	Leu	Ser	Arg	Leu	Arg	Gln	Arg	Gln	Ser	Leu	Thr	Ser	Gly	Gln	380	385	390
Glu	Leu	Thr	Glu	Ile	Pro	Ile	His	Trp	Thr	Ala	Lys	Leu	Pro	Ala	395	400	405
Lys	Trp	Ser	Val	Ser	Glu	Ser	Ser	Pro	His	Met	Ala	Pro	Val	Leu	410	415	420
Ala	Val	Val	Ala	Thr	Phe	Pro	Val	Leu	Ile	Leu	Trp	Leu			425	430	

<210> 25

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 25
 agttctggtc agcctatgtg cc 22

<210> 26
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 26
 cgtgatggtg tctttgtcca tggg 24

<210> 27
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 27
 ctccaccaat cccgatgaac ttgg 24

<210> 28
 <211> 50
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 28
 gagcagattg acctcatatc cgcgatgtgt gcctcctatt ctgagctgga 50

<210> 29
 <211> 1416
 <212> DNA
 <213> Homo Sapien

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 cgaccacact cagtagtccc agcaccacagg gcctgcaaga gcaggcacgg 150
 gccctgatgc gggacttccc gctcgtggac ggccacaacg acctgcccct 200
 ggtcctaagg caggtttacc agaaagggct acaggatgtt aacctgcgca 250
 atttcagcta cggccagacc agcctggaca ggcttagaga tggcctcgtg 300
 ggcgccagct tctggtcagc ctatgtgcca tgccagaccc aggaccggga 350
 tgccctgcgc ctcaccctgg agcagattga cctcatatcg cgcgatgtgtg 400

cctcctattc tgagctggag cttgtgacct cggctaaagc tctgaacgac 450
actcagaaat tggcctgcct catcggtgta gagggaggcc actcgctgga 500
caatagcctc tccatcttac gtaccttcta catgctggga gtgcgctacc 550
tgacgctcac ccacacctgc aacacaccct gggcagagag ctccgctaag 600
ggcgtccact ctttctacaa caacatcagc gggctgactg actttggtga 650
gaagggtggtg gcagaaatga accgcctggg catgatggta gacttatccc 700
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tgttctgat gacatcctgc agcttctgaa gaagaacggt ggcgtcgtga 850
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gttcatcggg attggtggag attatgatgg ggccggcaaa ttccctcagg 1000
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cgtggctgga gtgaggaaga gcttcagggt gtccttcgtg gaaacctgct 1100
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cagtctcaga gtccctcccc caccctgaca aaactcacac atgccaccg 1350
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aaaacccaag gacacc 1416

<210> 30

<211> 446

<212> PRT

<213> Homo Sapien

<400> 30

Met	Pro	Gly	Thr	Tyr	Ala	Pro	Ser	Thr	Thr	Leu	Ser	Ser	Pro	Ser
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Thr	Gln	Gly	Leu	Gln	Glu	Gln	Ala	Arg	Ala	Leu	Met	Arg	Asp	Phe
			20						25				30	

Pro	Leu	Val	Asp	Gly	His	Asn	Asp	Leu	Pro	Leu	Val	Leu	Arg	Gln
				35					40				45	

Val	Tyr	Gln	Lys	Gly	Leu	Gln	Asp	Val	Asn	Leu	Arg	Asn	Phe	Ser
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

50					55					60				
Tyr	Gly	Gln	Thr	Ser	Leu	Asp	Arg	Leu	Arg	Asp	Gly	Leu	Val	Gly
				65					70					75
Ala	Gln	Phe	Trp	Ser	Ala	Tyr	Val	Pro	Cys	Gln	Thr	Gln	Asp	Arg
				80					85					90
Asp	Ala	Leu	Arg	Leu	Thr	Leu	Glu	Gln	Ile	Asp	Leu	Ile	Arg	Arg
				95					100					105
Met	Cys	Ala	Ser	Tyr	Ser	Glu	Leu	Glu	Leu	Val	Thr	Ser	Ala	Lys
				110					115					120
Ala	Leu	Asn	Asp	Thr	Gln	Lys	Leu	Ala	Cys	Leu	Ile	Gly	Val	Glu
				125					130					135
Gly	Gly	His	Ser	Leu	Asp	Asn	Ser	Leu	Ser	Ile	Leu	Arg	Thr	Phe
				140					145					150
Tyr	Met	Leu	Gly	Val	Arg	Tyr	Leu	Thr	Leu	Thr	His	Thr	Cys	Asn
				155					160					165
Thr	Pro	Trp	Ala	Glu	Ser	Ser	Ala	Lys	Gly	Val	His	Ser	Phe	Tyr
				170					175					180
Asn	Asn	Ile	Ser	Gly	Leu	Thr	Asp	Phe	Gly	Glu	Lys	Val	Val	Ala
				185					190					195
Glu	Met	Asn	Arg	Leu	Gly	Met	Met	Val	Asp	Leu	Ser	His	Val	Ser
				200					205					210
Asp	Ala	Val	Ala	Arg	Arg	Ala	Leu	Glu	Val	Ser	Gln	Ala	Pro	Val
				215					220					225
Ile	Phe	Ser	His	Ser	Ala	Ala	Arg	Gly	Val	Cys	Asn	Ser	Ala	Arg
				230					235					240
Asn	Val	Pro	Asp	Asp	Ile	Leu	Gln	Leu	Leu	Lys	Lys	Asn	Gly	Gly
				245					250					255
Val	Val	Met	Val	Ser	Leu	Ser	Met	Gly	Val	Ile	Gln	Cys	Asn	Pro
				260					265					270
Ser	Ala	Asn	Val	Ser	Thr	Val	Ala	Asp	His	Phe	Asp	His	Ile	Lys
				275					280					285
Ala	Val	Ile	Gly	Ser	Lys	Phe	Ile	Gly	Ile	Gly	Gly	Asp	Tyr	Asp
				290					295					300
Gly	Ala	Gly	Lys	Phe	Pro	Gln	Gly	Leu	Glu	Asp	Val	Ser	Thr	Tyr
				305					310					315
Pro	Val	Leu	Ile	Glu	Glu	Leu	Leu	Ser	Arg	Gly	Trp	Ser	Glu	Glu
				320					325					330
Glu	Leu	Gln	Gly	Val	Leu	Arg	Gly	Asn	Leu	Leu	Arg	Val	Phe	Arg
				335					340					345

Gln	Val	Glu	Lys	Val	Gln	Glu	Glu	Asn	Lys	Trp	Gln	Ser	Pro	Leu
				350					355					360
Glu	Asp	Lys	Phe	Pro	Asp	Glu	Gln	Leu	Ser	Ser	Ser	Cys	His	Ser
				365					370					375
Asp	Leu	Ser	Arg	Leu	Arg	Gln	Arg	Gln	Ser	Leu	Thr	Ser	Gly	Gln
				380					385					390
Glu	Leu	Thr	Glu	Ile	Pro	Ile	His	Trp	Thr	Ala	Lys	Leu	Pro	Ala
				395					400					405
Lys	Trp	Ser	Val	Ser	Glu	Ser	Ser	Pro	His	Pro	Asp	Lys	Thr	His
				410					415					420
Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser
				425					430					435
Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr				
				440					445					

<210> 31
 <211> 1790
 <212> DNA
 <213> Homo Sapien

<400> 31
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 gcgtcccgcg ccctgcgcca ccgcgcgcga gccgcagccc gccgcgcgcc 100
 cccggcagcg ccggccccat gccgcgggcg cgccggggcc ccgcgcacca 150
 atccgcgcgg cgccgcgcgc cgttgctgcc cctgctgctg ctgctctgcg 200
 tcctcggggc gccgcgagcc ggatcaggag cccacacagc tgtgatcagt 250
 ccccaggatc ccacgcttct catcggtctc tcctgctgg ccacctgctc 300
 agtgcacgga gacccaccag gagccaccgc cgagggcctc tactggaccc 350
 tcaacgggcg ccgcctgccc cctgagctct cccgtgtact caacgcctcc 400
 accttgctc tggccctggc caacctcaat ggggccaggc agcggtcggg 450
 ggacaacctc gtgtgccacg cccgtgacgg cagcatcctg gctggctcct 500
 gcctctatgt tggcctgccc ccagagaaac ccgtcaacat cagctgctgg 550
 tccaagaaca tgaaggactt gacctgccgc tggacgccag gggccacgg 600
 ggagaccttc ctccacacca actactccct caagtacaag cttaggtgg 650
 atggccagga caacacatgt gaggagtacc acacagtggg gcccactcc 700
 tgccacatcc ccaaggacct ggctctcttt acgccctatg agatctgggt 750
 ggaggccacc aaccgcctgg gctctgcccg ctccgatgta ctcacgctgg 800

atatacctgga tgtggtgacc acggaccccc cgcccgacgt gcacgtgagc 850
 cgcgctcgggg gcctggagga ccagctgagc gtgcgctggg tgcgccacc 900
 cgccctcaag gatttcctct ttcaagcaa ataccagatc cgctaccgag 950
 tggaggacag tgtggactgg aaggtggtgg acgatgtgag caaccagacc 1000
 tctgcccgc tggccggcct gaaacccggc accgtgtact tcgtgcaagt 1050
 gcgctgcaac ccctttggca tctatggctc caagaaagcc gggatctgga 1100
 gtgagtggag ccaccccaca gccgcctcca ctccccgcag tgagcgcccg 1150
 ggcccgggcg gcggggcggtg cgaaccgcgg ggcgagagc cgagctcggg 1200
 gccggtgcgg cgcgagctca agcagttcct gggctggctc aagaagcacg 1250
 cgtactgctc caacctcagc ttccgctct acgaccagtg gcgagcctgg 1300
 atgcagaagt cgcaacaagc ccgcaaccag gacgagggga tctgcctc 1350
 gggcagacgg ggcacggcga gaggtcctgc cagataagct gtaggggctc 1400
 aggccaccct ccctgccacg tggagacgca gaggccgaac ccaaactggg 1450
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 gaggccacct ttgggtgcac ccagtggggt gtgtgtgtgt gtgtgagggt 1600
 tggttgagtt gcctagaacc cctgccaggg ctgggggtga gaaggggagt 1650
 cattactccc cattacctag ggcccctcca aaagagtcct tttaaataaa 1700
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 aaaaaaaaaa aaaaaaaaaa aaaaacaaaa aaaaaaaaaa 1790

<210> 32

<211> 422

<212> PRT

<213> Homo Sapien

<400> 32

Met	Pro	Ala	Gly	Arg	Arg	Gly	Pro	Ala	Ala	Gln	Ser	Ala	Arg	Arg
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Pro	Pro	Pro	Leu	Leu	Pro	Leu	Leu	Leu	Leu	Leu	Cys	Val	Leu	Gly
			20					25					30	
Ala	Pro	Arg	Ala	Gly	Ser	Gly	Ala	His	Thr	Ala	Val	Ile	Ser	Pro
			35					40					45	
Gln	Asp	Pro	Thr	Leu	Leu	Ile	Gly	Ser	Ser	Leu	Leu	Ala	Thr	Cys
			50					55					60	

Ser	Val	His	Gly	Asp	Pro	Pro	Gly	Ala	Thr	Ala	Glu	Gly	Leu	Tyr		65	70	75
Trp	Thr	Leu	Asn	Gly	Arg	Arg	Leu	Pro	Pro	Glu	Leu	Ser	Arg	Val		80	85	90
Leu	Asn	Ala	Ser	Thr	Leu	Ala	Leu	Ala	Leu	Ala	Asn	Leu	Asn	Gly		95	100	105
Ser	Arg	Gln	Arg	Ser	Gly	Asp	Asn	Leu	Val	Cys	His	Ala	Arg	Asp		110	115	120
Gly	Ser	Ile	Leu	Ala	Gly	Ser	Cys	Leu	Tyr	Val	Gly	Leu	Pro	Pro		125	130	135
Glu	Lys	Pro	Val	Asn	Ile	Ser	Cys	Trp	Ser	Lys	Asn	Met	Lys	Asp		140	145	150
Leu	Thr	Cys	Arg	Trp	Thr	Pro	Gly	Ala	His	Gly	Glu	Thr	Phe	Leu		155	160	165
His	Thr	Asn	Tyr	Ser	Leu	Lys	Tyr	Lys	Leu	Arg	Trp	Tyr	Gly	Gln		170	175	180
Asp	Asn	Thr	Cys	Glu	Glu	Tyr	His	Thr	Val	Gly	Pro	His	Ser	Cys		185	190	195
His	Ile	Pro	Lys	Asp	Leu	Ala	Leu	Phe	Thr	Pro	Tyr	Glu	Ile	Trp		200	205	210
Val	Glu	Ala	Thr	Asn	Arg	Leu	Gly	Ser	Ala	Arg	Ser	Asp	Val	Leu		215	220	225
Thr	Leu	Asp	Ile	Leu	Asp	Val	Val	Thr	Thr	Asp	Pro	Pro	Pro	Asp		230	235	240
Val	His	Val	Ser	Arg	Val	Gly	Gly	Leu	Glu	Asp	Gln	Leu	Ser	Val		245	250	255
Arg	Trp	Val	Ser	Pro	Pro	Ala	Leu	Lys	Asp	Phe	Leu	Phe	Gln	Ala		260	265	270
Lys	Tyr	Gln	Ile	Arg	Tyr	Arg	Val	Glu	Asp	Ser	Val	Asp	Trp	Lys		275	280	285
Val	Val	Asp	Asp	Val	Ser	Asn	Gln	Thr	Ser	Cys	Arg	Leu	Ala	Gly		290	295	300
Leu	Lys	Pro	Gly	Thr	Val	Tyr	Phe	Val	Gln	Val	Arg	Cys	Asn	Pro		305	310	315
Phe	Gly	Ile	Tyr	Gly	Ser	Lys	Lys	Ala	Gly	Ile	Trp	Ser	Glu	Trp		320	325	330
Ser	His	Pro	Thr	Ala	Ala	Ser	Thr	Pro	Arg	Ser	Glu	Arg	Pro	Gly		335	340	345
Pro	Gly	Gly	Gly	Ala	Cys	Glu	Pro	Arg	Gly	Gly	Glu	Pro	Ser	Ser				

	350		355		360									
Gly	Pro	Val	Arg	Arg	Glu	Leu	Lys	Gln	Phe	Leu	Gly	Trp	Leu	Lys
				365					370					375
Lys	His	Ala	Tyr	Cys	Ser	Asn	Leu	Ser	Phe	Arg	Leu	Tyr	Asp	Gln
				380					385					390
Trp	Arg	Ala	Trp	Met	Gln	Lys	Ser	His	Lys	Thr	Arg	Asn	Gln	Asp
				395					400					405
Glu	Gly	Ile	Leu	Pro	Ser	Gly	Arg	Arg	Gly	Thr	Ala	Arg	Gly	Pro
				410					415					420

Ala Arg

<210> 33

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 33

cccgcccgac gtgcacgtga gcc 23

<210> 34

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 34

tgagccagcc caggaactgc ttg 23

<210> 35

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 35

caagtgcgct gcaacccctt tggcatctat ggctccaaga aagccgggat 50

<210> 36

<211> 1771

<212> DNA

<213> Homo Sapien

<400> 36

cccacgcgtc cgctgggtgtt agatcgagca accctctaaa agcagtttag 50

agtgggtaaaa aaaaaaaaaa acacacccaaa cgctcgcagc cacaaaaggg 100
 atgaaatttc ttctggacat cctcctgctt ctcccgttac tgatcgtctg 150
 ctccctagag tccttcgtga agctttttat tcctaagagg agaaaatcag 200
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 ctgactgcct atgaatttgc taaacttaaa agcaagctgg ttctctggga 300
 tataaataag catggactgg aggaaacagc tgccaaatgc aagggactgg 350
 gtgccaaggt tcataccttt gtggtagact gcagcaaccg agaagatatt 400
 tacagctctg caaagaaggt gaaggcagaa attggagatg ttagtatttt 450
 agtaaataat gctgggtgtag tctatacatc agatttgttt gctacacaag 500
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 cttactgttc aagcaagttt gctgctgttg gatttcataa aactttgaca 700
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 tcctaatttc gtaaacactg gcttcatcaa aaatccaagt acaagtttgg 800
 gaccactct ggaacctgag gaagtggtaa acaggctgat gcatgggatt 850
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 aacattggaa aggatccttc ctgagcgttt cctggcagtt ttaaaacgaa 950
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 aaaatttgta ccataaccgt ttatttaaca tatattttta tttttgattg 1350
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 agaaacttca agctctctaa ataaaatgaa ggactatatc tagtggattt 1450
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gccactctgt ttcctgagag atacctcaca ttccaatgcc aaacatttct 1550
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ctggggattta aggagaattg agagaatgta cccacaaatg gcagcaataa 1650
taaattggatc acacttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1700
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<210> 37
<211> 300
<212> PRT
<213> Homo Sapien

<400> 37
Met Lys Phe Leu Leu Asp Ile Leu Leu Leu Leu Pro Leu Leu Ile
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Val Cys Ser Leu Glu Ser Phe Val Lys Leu Phe Ile Pro Lys Arg
20 25 30
Arg Lys Ser Val Thr Gly Glu Ile Val Leu Ile Thr Gly Ala Gly
35 40 45
His Gly Ile Gly Arg Leu Thr Ala Tyr Glu Phe Ala Lys Leu Lys
50 55 60
Ser Lys Leu Val Leu Trp Asp Ile Asn Lys His Gly Leu Glu Glu
65 70 75
Thr Ala Ala Lys Cys Lys Gly Leu Gly Ala Lys Val His Thr Phe
80 85 90
Val Val Asp Cys Ser Asn Arg Glu Asp Ile Tyr Ser Ser Ala Lys
95 100 105
Lys Val Lys Ala Glu Ile Gly Asp Val Ser Ile Leu Val Asn Asn
110 115 120
Ala Gly Val Val Tyr Thr Ser Asp Leu Phe Ala Thr Gln Asp Pro
125 130 135
Gln Ile Glu Lys Thr Phe Glu Val Asn Val Leu Ala His Phe Trp
140 145 150
Thr Thr Lys Ala Phe Leu Pro Ala Met Thr Lys Asn Asn His Gly
155 160 165
His Ile Val Thr Val Ala Ser Ala Ala Gly His Val Ser Val Pro
170 175 180
Phe Leu Leu Ala Tyr Cys Ser Ser Lys Phe Ala Ala Val Gly Phe
185 190 195
His Lys Thr Leu Thr Asp Glu Leu Ala Ala Leu Gln Ile Thr Gly

200	205	210
Val Lys Thr Thr Cys Leu Cys Pro Asn Phe	Val Asn Thr Gly Phe	
215	220	225
Ile Lys Asn Pro Ser Thr Ser Leu Gly Pro	Thr Leu Glu Pro Glu	
230	235	240
Glu Val Val Asn Arg Leu Met His Gly Ile	Leu Thr Glu Gln Lys	
245	250	255
Met Ile Phe Ile Pro Ser Ser Ile Ala Phe	Leu Thr Thr Leu Glu	
260	265	270
Arg Ile Leu Pro Glu Arg Phe Leu Ala Val	Leu Lys Arg Lys Ile	
275	280	285
Ser Val Lys Phe Asp Ala Val Ile Gly Tyr	Lys Met Lys Ala Gln	
290	295	300

<210> 38
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 38
 ggtgaaggca gaaattggag atg 23

<210> 39
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 39
 atcccatgca tcagcctgtt tacc 24

<210> 40
 <211> 48
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 40
 gctggtgtag tctatacatc agatttggtt gctacacaag atcctcag 48

<210> 41
 <211> 1377
 <212> DNA
 <213> Homo Sapien

<400> 41
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 gaaccaggac tggggtgacg gcagggcagg gggcgcttg ccggggagaa 100
 gcgcgggggc tggagacca ccaactggag ggtccggagt agcgagcgcc 150
 ccgaaggagg ccatcgggga gccgggaggg gggactgcga gaggaccccg 200
 gcgtccgggc tcccggtgcc agcgctatga ggccactcct cgtcctgctg 250
 ctcttgggccc tggcgggccg ctgcggccca ctggacgaca acaagatccc 300
 cagcctctgc ccggggcacc ccggccttcc aggcacgccg ggccaccatg 350
 gcagccaggg cttgccgggc cgcgatggcc gcgacggccg cgacggcgcg 400
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 ccgggcctgc cggggagtgc tcggtgcctc cgcgatccgc cttcagcgcc 550
 aagcgctccg agagccgggt gcctccgccg tctgacgcac ctttgccctt 600
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 gtgtaagtcc ccagttgct ctgggtccagg agccacggg ggggtgctct 1250
 cttcctggtc ctctgcttct ctggatcctc cccacccct cctgctcctg 1300
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 aaaaaaaaaa aaaaaaaaaa aaaaaaa 1377

<210> 42

<211> 243
 <212> PRT
 <213> Homo Sapien

<400> 42

Met	Arg	Pro	Leu	Leu	Val	Leu	Leu	Leu	Leu	Gly	Leu	Ala	Ala	Gly	1	5	10	15
Ser	Pro	Pro	Leu	Asp	Asp	Asn	Lys	Ile	Pro	Ser	Leu	Cys	Pro	Gly	20	25	30	
His	Pro	Gly	Leu	Pro	Gly	Thr	Pro	Gly	His	His	Gly	Ser	Gln	Gly	35	40	45	
Leu	Pro	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Ala	Pro	Gly	50	55	60	
Ala	Pro	Gly	Glu	Lys	Gly	Glu	Gly	Gly	Arg	Pro	Gly	Leu	Pro	Gly	65	70	75	
Pro	Arg	Gly	Asp	Pro	Gly	Pro	Arg	Gly	Glu	Ala	Gly	Pro	Ala	Gly	80	85	90	
Pro	Thr	Gly	Pro	Ala	Gly	Glu	Cys	Ser	Val	Pro	Pro	Arg	Ser	Ala	95	100	105	
Phe	Ser	Ala	Lys	Arg	Ser	Glu	Ser	Arg	Val	Pro	Pro	Pro	Ser	Asp	110	115	120	
Ala	Pro	Leu	Pro	Phe	Asp	Arg	Val	Leu	Val	Asn	Glu	Gln	Gly	His	125	130	135	
Tyr	Asp	Ala	Val	Thr	Gly	Lys	Phe	Thr	Cys	Gln	Val	Pro	Gly	Val	140	145	150	
Tyr	Tyr	Phe	Ala	Val	His	Ala	Thr	Val	Tyr	Arg	Ala	Ser	Leu	Gln	155	160	165	
Phe	Asp	Leu	Val	Lys	Asn	Gly	Glu	Ser	Ile	Ala	Ser	Phe	Phe	Gln	170	175	180	
Phe	Phe	Gly	Gly	Trp	Pro	Lys	Pro	Ala	Ser	Leu	Ser	Gly	Gly	Ala	185	190	195	
Met	Val	Arg	Leu	Glu	Pro	Glu	Asp	Gln	Val	Trp	Val	Gln	Val	Gly	200	205	210	
Val	Gly	Asp	Tyr	Ile	Gly	Ile	Tyr	Ala	Ser	Ile	Lys	Thr	Asp	Ser	215	220	225	
Thr	Phe	Ser	Gly	Phe	Leu	Val	Tyr	Ser	Asp	Trp	His	Ser	Ser	Pro	230	235	240	

Val Phe Ala

<210> 43
 <211> 24

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 43
 tacaggccca gtcaggacca gggg 24

 <210> 44
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 44
 agccagcctc gctctcgg 18

 <210> 45
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 45
 gtctgcgatc aggtctgg 18

 <210> 46
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 46
 gaaagaggca atggattcgc 20

 <210> 47
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 47
 gacttacact tgccagcaca gcac 24

 <210> 48
 <211> 45
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 48

ggagcaccac caactggagg gtccggagta gcgagcgccc cgaag 45

<210> 49

<211> 1876

<212> DNA

<213> Homo Sapien

<400> 49

ctcttttgtc caccagccca gcctgactcc tggagattgt gaatagctcc 50
atccagcctg agaaacaagc cgggtggctg agccaggctg tgcacggagc 100
acctgacggg cccaacagac ccatgctgca tccagagacc tcccctggcc 150
gggggcatct cctggctgtg ctcttgcccc tccttggcac cacctgggca 200
gaggtgtggc caccacagct gcaggagcag gctccgatgg ccggagccct 250
gaacaggaag gagagtttct tgctcctctc cctgcacaac cgcttgcgca 300
gctgggtcca gcccctgcg gctgacatgc ggaggctgga ctggagtgc 350
agcctggccc aactggctca agccagggca gccctctgtg gaatcccaac 400
cccagcctg gcatccggcc tgtggcgcac cctgcaagtg ggctggaaca 450
tgcagctgct gcccgcgggc ttggcgctct ttgttgaagt ggtcagccta 500
tggtttgcag aggggcagcg gtacagccac gcggcaggag agtgtgctcg 550
caacgccacc tgcaccact acacgcagct cgtgtgggccc acctcaagcc 600
agctgggctg tgggcggcac ctgtgctctg caggccagac agcgatagaa 650
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gacaatcatc ccctataaga aggggtgcctg gtgttcgctc tgcacagcca 750
gtgtctcagg ctgcttcaaa gcctgggacc atgcaggggg gctctgtgag 800
gtccccagga atccttgctg catgagctgc cagaaccatg gacgtctcaa 850
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gccaagtgcg gtgcagcctg cagtgtgtgc acggccgggt ccgggaggag 950
gagtgtctcg gcgtctgtga catcggtac gggggagccc agtgtgccac 1000
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gcttcatggt gtcttcagag gcagacacct attacagagc caggatgaaa 1100
tgtcagagga aaggcggggt gctggcccag atcaagagcc agaaagtgc 1150

ggacatcctc gccttctatc tgggccgcct ggagaccacc aacgaggtga 1200
 ctgacagtga cttcgagacc aggaacttct ggatcgggct cacctacaag 1250
 accgccaagg actccttccg ctggggccaca ggggagcacc aggccttcac 1300
 cagttttgcc tttgggcagc ctgacaacca cgggctggtg tggctgagtg 1350
 ctgccatggg gtttggaac tgcgtggagc tgcaggcttc agctgccttc 1400
 aactggaacg accagcgctg caaaacccga aaccgttaca tctgccagtt 1450
 tgcccaggag cacatctccc ggtggggccc agggctcctga ggcctgacca 1500
 catggctccc tcgcctgccc tgggagcacc ggctctgctt acctgtctgc 1550
 ccacctgtct ggaacaaggg ccagggttaag accacatgcc tcatgtccaa 1600
 agaggtctca gaccttgcaac aatgccagaa gttgggcaga gagaggcagg 1650
 gaggccagtg agggccaggg agtgagtgtt agaagaagct ggggcccttc 1700
 gcctgctttt gattgggaag atgggcttca attagatggc gaaggagagg 1750
 acaccgccag tgggccaaaa aggtctgtct cttccacctg gccagaccc 1800
 tgtggggcag cggagcttcc ctgtggcatg aacccacgg ggtattaaat 1850
 tatgaatcag ctgaaaaaaaa aaaaaa 1876

<210> 50
 <211> 455
 <212> PRT
 <213> Homo Sapien

<400> 50
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 1 5 10 15
 Val Leu Leu Ala Leu Leu Gly Thr Thr Trp Ala Glu Val Trp Pro
 20 25 30
 Pro Gln Leu Gln Glu Gln Ala Pro Met Ala Gly Ala Leu Asn Arg
 35 40 45
 Lys Glu Ser Phe Leu Leu Leu Ser Leu His Asn Arg Leu Arg Ser
 50 55 60
 Trp Val Gln Pro Pro Ala Ala Asp Met Arg Arg Leu Asp Trp Ser
 65 70 75
 Asp Ser Leu Ala Gln Leu Ala Gln Ala Arg Ala Ala Leu Cys Gly
 80 85 90
 Ile Pro Thr Pro Ser Leu Ala Ser Gly Leu Trp Arg Thr Leu Gln
 95 100 105
 Val Gly Trp Asn Met Gln Leu Leu Pro Ala Gly Leu Ala Ser Phe

110										115					120				
Val	Glu	Val	Val	Ser	Leu	Trp	Phe	Ala	Glu	Gly	Gln	Arg	Tyr	Ser					
				125					130					135					
His	Ala	Ala	Gly	Glu	Cys	Ala	Arg	Asn	Ala	Thr	Cys	Thr	His	Tyr					
				140					145					150					
Thr	Gln	Leu	Val	Trp	Ala	Thr	Ser	Ser	Gln	Leu	Gly	Cys	Gly	Arg					
				155					160					165					
His	Leu	Cys	Ser	Ala	Gly	Gln	Thr	Ala	Ile	Glu	Ala	Phe	Val	Cys					
				170					175					180					
Ala	Tyr	Ser	Pro	Gly	Gly	Asn	Trp	Glu	Val	Asn	Gly	Lys	Thr	Ile					
				185					190					195					
Ile	Pro	Tyr	Lys	Lys	Gly	Ala	Trp	Cys	Ser	Leu	Cys	Thr	Ala	Ser					
				200					205					210					
Val	Ser	Gly	Cys	Phe	Lys	Ala	Trp	Asp	His	Ala	Gly	Gly	Leu	Cys					
				215					220					225					
Glu	Val	Pro	Arg	Asn	Pro	Cys	Arg	Met	Ser	Cys	Gln	Asn	His	Gly					
				230					235					240					
Arg	Leu	Asn	Ile	Ser	Thr	Cys	His	Cys	His	Cys	Pro	Pro	Gly	Tyr					
				245					250					255					
Thr	Gly	Arg	Tyr	Cys	Gln	Val	Arg	Cys	Ser	Leu	Gln	Cys	Val	His					
				260					265					270					
Gly	Arg	Phe	Arg	Glu	Glu	Glu	Cys	Ser	Cys	Val	Cys	Asp	Ile	Gly					
				275					280					285					
Tyr	Gly	Gly	Ala	Gln	Cys	Ala	Thr	Lys	Val	His	Phe	Pro	Phe	His					
				290					295					300					
Thr	Cys	Asp	Leu	Arg	Ile	Asp	Gly	Asp	Cys	Phe	Met	Val	Ser	Ser					
				305					310					315					
Glu	Ala	Asp	Thr	Tyr	Tyr	Arg	Ala	Arg	Met	Lys	Cys	Gln	Arg	Lys					
				320					325					330					
Gly	Gly	Val	Leu	Ala	Gln	Ile	Lys	Ser	Gln	Lys	Val	Gln	Asp	Ile					
				335					340					345					
Leu	Ala	Phe	Tyr	Leu	Gly	Arg	Leu	Glu	Thr	Thr	Asn	Glu	Val	Thr					
				350					355					360					
Asp	Ser	Asp	Phe	Glu	Thr	Arg	Asn	Phe	Trp	Ile	Gly	Leu	Thr	Tyr					
				365					370					375					
Lys	Thr	Ala	Lys	Asp	Ser	Phe	Arg	Trp	Ala	Thr	Gly	Glu	His	Gln					
				380					385					390					
Ala	Phe	Thr	Ser	Phe	Ala	Phe	Gly	Gln	Pro	Asp	Asn	His	Gly	Leu					
				395					400					405					

Val	Trp	Leu	Ser	Ala	Ala	Met	Gly	Phe	Gly	Asn	Cys	Val	Glu	Leu
				410					415					420
Gln	Ala	Ser	Ala	Ala	Phe	Asn	Trp	Asn	Asp	Gln	Arg	Cys	Lys	Thr
				425					430					435
Arg	Asn	Arg	Tyr	Ile	Cys	Gln	Phe	Ala	Gln	Glu	His	Ile	Ser	Arg
				440					445					450
Trp	Gly	Pro	Gly	Ser										
				455										

<210> 51
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 51
 aggaacttct ggatcgggct cacc 24

<210> 52
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 52
 gggctctgggc caggtggaag agag 24

<210> 53
 <211> 45
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 53
 gccaaaggact ccttccgctg ggccacaggg gagcaccagg ccttc 45

<210> 54
 <211> 2331
 <212> DNA
 <213> Homo Sapien

<400> 54
 cggacgcgtg ggctgggccc tgcaaagcgt gtcccgcggg gtccccgagc 50
 gtcccgcgcc ctgcggccgc catgctcctg ctgctggggc tgtgcctggg 100
 gctgtccctg tgtgtggggc cgcaggaaga ggcgcagagc tggggccact 150
 cttcggagca ggatggactc aggggtcccga ggcaagtcag actgttgagc 200

aggctgaaaa ccaaaccttt gatgacagaa ttctcagtga agtctaccat 250
 catttcccgt tatgccttca ctacggtttc ctgcagaatg ctgaacagag 300
 cttctgaaga ccaggacatt gagttccaga tgcagattcc agctgcagct 350
 ttcatcacca acttcactat gcttattgga gacaaggtgt atcagggcga 400
 aattacagag agagaaaaga agagtgggtga tagggtaaaa gagaaaagga 450
 ataaaaccac agaagaaaat ggagagaagg ggactgaaat attcagagct 500
 tctgcagtga ttcccagcaa ggacaaagcc gcctttttcc tgagttatga 550
 ggagcttctg cagaggcgcc tgggcaagta cgagcacagc atcagcgtgc 600
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 agcgcgggca tcgcatccct ggaggtgctg ccgcttcaca acagcaggca 700
 gaggggcagt gggcgcgggg aagatgattc tgggcctccc ccatctactg 750
 tcattaacca aaatgaaaca ttgccaaca taatttttaa acctactgta 800
 gtacaacaag ccaggattgc ccagaatgga attttgggag actttatcat 850
 tagatatgac gtcaatagag aacagagcat tggggacatc caggttctaa 900
 atggctattt tgtgcactac ttgtctcta aagaccttc ccctttacc 950
 aagaatgtgg tattegtgct tgacagcagt gcttctatgg tgggaaccaa 1000
 actccggcag accaaggatg ccctcttcac aattctccat gacctccgac 1050
 cccaggaccg tttcagtatc attggatttt ccaaccggat caaagtatgg 1100
 aaggaccact tgatatcagt cactccagac agcatcaggg atgggaaagt 1150
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 ggagaccgga gcgtgtccct catcgtcttc ctgacggatg ggaagcccac 1300
 ggtcggggag acgcacaccc tcaagatect caacaacacc cgagaggccg 1350
 cccgaggcca agtctgcac ttcaccattg gcatcggcaa cgacgtggac 1400
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acgtggaggt caccgccagc aacagtaaga aattcatcat cctgaagaca 1700
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 ggagctacct caccacaaag gagctgctga gctcctggct gcaaagtgc 1850
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 aaaaaagaca tgggagagat ggtgtttttc ctctccacca cctggggata 2150
 cgatgagaag atggccacct gcaagccagg aagacggccc tcaccagaca 2200
 ccatgtctgc tggcaccttg atcttgacc tcccagcctc cagaactgtg 2250
 agaaataaat gtgttttgtt taagctaaaa aaaaaaaaaa aaaaaaaaaa 2300
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 2331

<210> 55

<211> 694

<212> PRT

<213> Homo Sapien

<400> 55

Met	Leu	Leu	Leu	Leu	Gly	Leu	Cys	Leu	Gly	Leu	Ser	Leu	Cys	Val
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Gly	Ser	Gln	Glu	Glu	Ala	Gln	Ser	Trp	Gly	His	Ser	Ser	Glu	Gln
				20					25					30
Asp	Gly	Leu	Arg	Val	Pro	Arg	Gln	Val	Arg	Leu	Leu	Gln	Arg	Leu
				35					40					45
Lys	Thr	Lys	Pro	Leu	Met	Thr	Glu	Phe	Ser	Val	Lys	Ser	Thr	Ile
				50					55					60
Ile	Ser	Arg	Tyr	Ala	Phe	Thr	Thr	Val	Ser	Cys	Arg	Met	Leu	Asn
				65					70					75
Arg	Ala	Ser	Glu	Asp	Gln	Asp	Ile	Glu	Phe	Gln	Met	Gln	Ile	Pro
				80					85					90
Ala	Ala	Ala	Phe	Ile	Thr	Asn	Phe	Thr	Met	Leu	Ile	Gly	Asp	Lys
				95					100					105
Val	Tyr	Gln	Gly	Glu	Ile	Thr	Glu	Arg	Glu	Lys	Lys	Ser	Gly	Asp
				110					115					120

Arg	Val	Lys	Glu	Lys	Arg	Asn	Lys	Thr	Thr	Glu	Glu	Asn	Gly	Glu	125	130	135
Lys	Gly	Thr	Glu	Ile	Phe	Arg	Ala	Ser	Ala	Val	Ile	Pro	Ser	Lys	140	145	150
Asp	Lys	Ala	Ala	Phe	Phe	Leu	Ser	Tyr	Glu	Glu	Leu	Leu	Gln	Arg	155	160	165
Arg	Leu	Gly	Lys	Tyr	Glu	His	Ser	Ile	Ser	Val	Arg	Pro	Gln	Gln	170	175	180
Leu	Ser	Gly	Arg	Leu	Ser	Val	Asp	Val	Asn	Ile	Leu	Glu	Ser	Ala	185	190	195
Gly	Ile	Ala	Ser	Leu	Glu	Val	Leu	Pro	Leu	His	Asn	Ser	Arg	Gln	200	205	210
Arg	Gly	Ser	Gly	Arg	Gly	Glu	Asp	Asp	Ser	Gly	Pro	Pro	Pro	Ser	215	220	225
Thr	Val	Ile	Asn	Gln	Asn	Glu	Thr	Phe	Ala	Asn	Ile	Ile	Phe	Lys	230	235	240
Pro	Thr	Val	Val	Gln	Gln	Ala	Arg	Ile	Ala	Gln	Asn	Gly	Ile	Leu	245	250	255
Gly	Asp	Phe	Ile	Ile	Arg	Tyr	Asp	Val	Asn	Arg	Glu	Gln	Ser	Ile	260	265	270
Gly	Asp	Ile	Gln	Val	Leu	Asn	Gly	Tyr	Phe	Val	His	Tyr	Phe	Ala	275	280	285
Pro	Lys	Asp	Leu	Pro	Pro	Leu	Pro	Lys	Asn	Val	Val	Phe	Val	Leu	290	295	300
Asp	Ser	Ser	Ala	Ser	Met	Val	Gly	Thr	Lys	Leu	Arg	Gln	Thr	Lys	305	310	315
Asp	Ala	Leu	Phe	Thr	Ile	Leu	His	Asp	Leu	Arg	Pro	Gln	Asp	Arg	320	325	330
Phe	Ser	Ile	Ile	Gly	Phe	Ser	Asn	Arg	Ile	Lys	Val	Trp	Lys	Asp	335	340	345
His	Leu	Ile	Ser	Val	Thr	Pro	Asp	Ser	Ile	Arg	Asp	Gly	Lys	Val	350	355	360
Tyr	Ile	His	His	Met	Ser	Pro	Thr	Gly	Gly	Thr	Asp	Ile	Asn	Gly	365	370	375
Ala	Leu	Gln	Arg	Ala	Ile	Arg	Leu	Leu	Asn	Lys	Tyr	Val	Ala	His	380	385	390
Ser	Gly	Ile	Gly	Asp	Arg	Ser	Val	Ser	Leu	Ile	Val	Phe	Leu	Thr	395	400	405
Asp	Gly	Lys	Pro	Thr	Val	Gly	Glu	Thr	His	Thr	Leu	Lys	Ile	Leu			

410					415					420				
Asn	Asn	Thr	Arg	Glu	Ala	Ala	Arg	Gly	Gln	Val	Cys	Ile	Phe	Thr
				425					430					435
Ile	Gly	Ile	Gly	Asn	Asp	Val	Asp	Phe	Arg	Leu	Leu	Glu	Lys	Leu
				440					445					450
Ser	Leu	Glu	Asn	Cys	Gly	Leu	Thr	Arg	Arg	Val	His	Glu	Glu	Glu
				455					460					465
Asp	Ala	Gly	Ser	Gln	Leu	Ile	Gly	Phe	Tyr	Asp	Glu	Ile	Arg	Thr
				470					475					480
Pro	Leu	Leu	Ser	Asp	Ile	Arg	Ile	Asp	Tyr	Pro	Pro	Ser	Ser	Val
				485					490					495
Val	Gln	Ala	Thr	Lys	Thr	Leu	Phe	Pro	Asn	Tyr	Phe	Asn	Gly	Ser
				500					505					510
Glu	Ile	Ile	Ile	Ala	Gly	Lys	Leu	Val	Asp	Arg	Lys	Leu	Asp	His
				515					520					525
Leu	His	Val	Glu	Val	Thr	Ala	Ser	Asn	Ser	Lys	Lys	Phe	Ile	Ile
				530					535					540
Leu	Lys	Thr	Asp	Val	Pro	Val	Arg	Pro	Gln	Lys	Ala	Gly	Lys	Asp
				545					550					555
Val	Thr	Gly	Ser	Pro	Arg	Pro	Gly	Gly	Asp	Gly	Glu	Gly	Asp	Thr
				560					565					570
Asn	His	Ile	Glu	Arg	Leu	Trp	Ser	Tyr	Leu	Thr	Thr	Lys	Glu	Leu
				575					580					585
Leu	Ser	Ser	Trp	Leu	Gln	Ser	Asp	Asp	Glu	Pro	Glu	Lys	Glu	Arg
				590					595					600
Leu	Arg	Gln	Arg	Ala	Gln	Ala	Leu	Ala	Val	Ser	Tyr	Arg	Phe	Leu
				605					610					615
Thr	Pro	Phe	Thr	Ser	Met	Lys	Leu	Arg	Gly	Pro	Val	Pro	Arg	Met
				620					625					630
Asp	Gly	Leu	Glu	Glu	Ala	His	Gly	Met	Ser	Ala	Ala	Met	Gly	Pro
				635					640					645
Glu	Pro	Val	Val	Gln	Ser	Val	Arg	Gly	Ala	Gly	Thr	Gln	Pro	Gly
				650					655					660
Pro	Leu	Leu	Lys	Lys	Pro	Asn	Ser	Val	Lys	Lys	Lys	Gln	Asn	Lys
				665					670					675
Thr	Lys	Lys	Arg	His	Gly	Arg	Asp	Gly	Val	Phe	Pro	Leu	His	His
				680					685					690
Leu	Gly	Ile	Arg											

<210> 56
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 56
gtgggaacca aactccggca gacc 24

<210> 57
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 57
cacatcgagc gtctctgg 18

<210> 58
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 58
agccgctcct tctccggttc atcg 24

<210> 59
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 59
tggaaggacc acttgatata agtcactcca gacagcatca gggatggg 48

<210> 60
<211> 1413
<212> DNA
<213> Homo Sapien

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ccagtgtgcg gcggcagcgg cggcggcggc gcctcccggg ctccggcttc 100
tgctgttgct cttctccgcc gcggcactga tccccacagg tgatgggcag 150
aatctgttta cgaaagacgt gacagtgatc gagggagagg ttgcgaccat 200

cagttgccaa gtcaataaga gtgacgactc tgtgattcag ctactgaatc 250
 ccaacaggca gaccatztat ttcagggact tcaggccttt gaaggacagc 300
 aggtttcagt tgctgaattt ttctagcagt gaactcaaag tatcattgac 350
 aaacgtctca atttctgatg aaggaagata cttttgccag ctctataaccg 400
 atccccacaca ggaaagttac accaccatca cagtcctggg cccaccacgt 450
 aatctgatga tcgatatcca gaaagacact gcggtggaag gtgaggagat 500
 tgaagtcaac tgcactgcta tggccagcaa gccagccacg actatcaggt 550
 ggttcaaagg gaacacagag ctaaaaggca aatcggaggt ggaagagtgg 600
 tcagacatgt aactgtgac cagtcagctg atgctgaagg tgcacaagga 650
 ggacgatggg gtcccagtgat tctgccaggt ggagcaccct gcggtcactg 700
 gaaacctgca gaccagcgg tatctagaag tacagtataa gcctcaagtg 750
 cacattcaga tgacttatcc tctacaaggc ttaaccggg aaggggacgc 800
 gcttgagtta acatgtgaag ccatcgaggaa gcccagcct gtgatggtaa 850
 cttgggtgag agtcgatgat gaaatgcctc aacacgccgt actgtctggg 900
 cccaacctgt tcatcaataa cctaaacaaa acagataatg gtacataaccg 950
 ctgtgaagct tcaaacatag tggggaaagc tctctcgat tatatgctgt 1000
 atgtatacga tccccacaca actatccctc ctcccacaac aaccaccacc 1050
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 agcaggtgaa gaaggctcga tcagggcagt ggatcatgcc gtgatcgggtg 1150
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<210> 61

<211> 440

<212> PRT

<213> Homo Sapien

<400> 61

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Phe	Ser	Ala	Ala	Ala	Leu	Ile	Pro	Thr	Gly	Asp	Gly	Gln	Asn	Leu		35	40	45
Phe	Thr	Lys	Asp	Val	Thr	Val	Ile	Glu	Gly	Glu	Val	Ala	Thr	Ile		50	55	60
Ser	Cys	Gln	Val	Asn	Lys	Ser	Asp	Asp	Ser	Val	Ile	Gln	Leu	Leu		65	70	75
Asn	Pro	Asn	Arg	Gln	Thr	Ile	Tyr	Phe	Arg	Asp	Phe	Arg	Pro	Leu		80	85	90
Lys	Asp	Ser	Arg	Phe	Gln	Leu	Leu	Asn	Phe	Ser	Ser	Ser	Glu	Leu		95	100	105
Lys	Val	Ser	Leu	Thr	Asn	Val	Ser	Ile	Ser	Asp	Glu	Gly	Arg	Tyr		110	115	120
Phe	Cys	Gln	Leu	Tyr	Thr	Asp	Pro	Pro	Gln	Glu	Ser	Tyr	Thr	Thr		125	130	135
Ile	Thr	Val	Leu	Val	Pro	Pro	Arg	Asn	Leu	Met	Ile	Asp	Ile	Gln		140	145	150
Lys	Asp	Thr	Ala	Val	Glu	Gly	Glu	Glu	Ile	Glu	Val	Asn	Cys	Thr		155	160	165
Ala	Met	Ala	Ser	Lys	Pro	Ala	Thr	Thr	Ile	Arg	Trp	Phe	Lys	Gly		170	175	180
Asn	Thr	Glu	Leu	Lys	Gly	Lys	Ser	Glu	Val	Glu	Glu	Trp	Ser	Asp		185	190	195
Met	Tyr	Thr	Val	Thr	Ser	Gln	Leu	Met	Leu	Lys	Val	His	Lys	Glu		200	205	210
Asp	Asp	Gly	Val	Pro	Val	Ile	Cys	Gln	Val	Glu	His	Pro	Ala	Val		215	220	225
Thr	Gly	Asn	Leu	Gln	Thr	Gln	Arg	Tyr	Leu	Glu	Val	Gln	Tyr	Lys		230	235	240
Pro	Gln	Val	His	Ile	Gln	Met	Thr	Tyr	Pro	Leu	Gln	Gly	Leu	Thr		245	250	255
Arg	Glu	Gly	Asp	Ala	Leu	Glu	Leu	Thr	Cys	Glu	Ala	Ile	Gly	Lys		260	265	270
Pro	Gln	Pro	Val	Met	Val	Thr	Trp	Val	Arg	Val	Asp	Asp	Glu	Met		275	280	285
Pro	Gln	His	Ala	Val	Leu	Ser	Gly	Pro	Asn	Leu	Phe	Ile	Asn	Asn		290	295	300
Leu	Asn	Lys	Thr	Asp	Asn	Gly	Thr	Tyr	Arg	Cys	Glu	Ala	Ser	Asn				

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Ile Val Gly Lys	Ala His Ser Asp Tyr	Met Leu Tyr Val Tyr	Asp
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Pro Pro Thr Thr	Ile Pro Pro Pro Thr	Thr Thr Thr Thr Thr	Thr
	335	340	345
Thr Thr Thr Thr	Thr Thr Ile Leu Thr	Ile Ile Thr Asp Ser	Arg
	350	355	360
Ala Gly Glu Glu	Gly Ser Ile Arg Ala	Val Asp His Ala Val	Ile
	365	370	375
Gly Gly Val Val	Ala Val Val Val Phe	Ala Met Leu Cys Leu	Leu
	380	385	390
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Thr His Glu Ala	Lys Gly Ala Asp Asp	Ala Ala Asp Ala Asp	Thr
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 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

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<210> 64
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 <223> Synthetic oligonucleotide probe

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<210> 66
 <211> 24
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 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 66
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<210> 67
 <211> 50
 <212> DNA
 <213> Artificial Sequence

<220>
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<210> 68
 <211> 2555
 <212> DNA
 <213> Homo Sapien

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<210> 69
<211> 598
<212> PRT
<213> Homo Sapien

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35 40 45
Val Pro Arg Asp Val Pro Pro Asp Thr Val Gly Leu Tyr Val Phe
50 55 60
Glu Asn Gly Ile Thr Met Leu Asp Ala Ser Ser Phe Ala Gly Leu
65 70 75
Pro Gly Leu Gln Leu Leu Asp Leu Ser Gln Asn Gln Ile Ala Ser
80 85 90
Leu Arg Leu Pro Arg Leu Leu Leu Leu Asp Leu Ser His Asn Ser
95 100 105
Leu Leu Ala Leu Glu Pro Gly Ile Leu Asp Thr Ala Asn Val Glu

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			140						145					150
Asn	Gln	Leu	Glu	Arg	Val	Pro	Pro	Val	Ile	Arg	Gly	Leu	Arg	Gly
			155						160					165
Leu	Thr	Arg	Leu	Arg	Leu	Ala	Gly	Asn	Thr	Arg	Ile	Ala	Gln	Leu
			170						175					180
Arg	Pro	Glu	Asp	Leu	Ala	Gly	Leu	Ala	Ala	Leu	Gln	Glu	Leu	Asp
			185						190					195
Val	Ser	Asn	Leu	Ser	Leu	Gln	Ala	Leu	Pro	Gly	Asp	Leu	Ser	Gly
			200						205					210
Leu	Phe	Pro	Arg	Leu	Arg	Leu	Leu	Ala	Ala	Ala	Arg	Asn	Pro	Phe
			215						220					225
Asn	Cys	Val	Cys	Pro	Leu	Ser	Trp	Phe	Gly	Pro	Trp	Val	Arg	Glu
			230						235					240
Ser	His	Val	Thr	Leu	Ala	Ser	Pro	Glu	Glu	Thr	Arg	Cys	His	Phe
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Pro	Pro	Lys	Asn	Ala	Gly	Arg	Leu	Leu	Leu	Glu	Leu	Asp	Tyr	Ala
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Asp	Phe	Gly	Cys	Pro	Ala	Thr	Thr	Thr	Thr	Ala	Thr	Val	Pro	Thr
			275						280					285
Thr	Arg	Pro	Val	Val	Arg	Glu	Pro	Thr	Ala	Leu	Ser	Ser	Ser	Leu
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Ser	Pro	Pro	Ser	Thr	Ala	Pro	Pro	Thr	Val	Gly	Pro	Val	Pro	Gln
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Pro	Gln	Asp	Cys	Pro	Pro	Ser	Thr	Cys	Leu	Asn	Gly	Gly	Thr	Cys
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His	Leu	Gly	Thr	Arg	His	His	Leu	Ala	Cys	Leu	Cys	Pro	Glu	Gly
			350						355					360
Phe	Thr	Gly	Leu	Tyr	Cys	Glu	Ser	Gln	Met	Gly	Gln	Gly	Thr	Arg
			365						370					375
Pro	Ser	Pro	Thr	Pro	Val	Thr	Pro	Arg	Pro	Pro	Arg	Ser	Leu	Thr
			380						385					390
Leu	Gly	Ile	Glu	Pro	Val	Ser	Pro	Thr	Ser	Leu	Arg	Val	Gly	Leu
			395						400					405

Gln Arg Tyr Leu	Gln Gly Ser Ser Val	Gln Leu Arg Ser Leu Arg
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Leu Arg Leu Pro	Ala Ser Leu Ala Glu	Tyr Thr Val Thr Gln Leu
440	445	450
Arg Pro Asn Ala	Thr Tyr Ser Val Cys	Val Met Pro Leu Gly Pro
455	460	465
Gly Arg Val Pro	Glu Gly Glu Glu Ala	Cys Gly Glu Ala His Thr
470	475	480
Pro Pro Ala Val	His Ser Asn His Ala	Pro Val Thr Gln Ala Arg
485	490	495
Glu Gly Asn Leu	Pro Leu Leu Ile Ala	Pro Ala Leu Ala Ala Val
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Leu Leu Ala Ala	Leu Ala Ala Val Gly	Ala Ala Tyr Cys Val Arg
515	520	525
Arg Gly Arg Ala	Met Ala Ala Ala Ala	Gln Asp Lys Gly Gln Val
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Gly Pro Gly Ala	Gly Pro Leu Glu Leu	Glu Gly Val Lys Val Pro
545	550	555
Leu Glu Pro Gly	Pro Lys Ala Thr Glu	Gly Gly Gly Glu Ala Leu
560	565	570
Pro Ser Gly Ser	Glu Cys Glu Val Pro	Leu Met Gly Phe Pro Gly
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Pro Gly Leu Gln	Ser Pro Leu His Ala	Lys Pro Tyr Ile
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<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

<400> 70

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<210> 71

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 71
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<210> 72
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 <212> DNA
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<220>
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<400> 72
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<210> 73
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 <212> DNA
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<220>
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<210> 74
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 <212> DNA
 <213> Artificial Sequence

<220>
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<210> 75
 <211> 1077
 <212> DNA
 <213> Homo Sapien

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<210> 76

<211> 250

<212> PRT

<213> Homo Sapien

<400> 76

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Gln	Gly	Tyr	Gly	Val	Arg	Ile	Gln	Asp	Ala	Gly	Val	Tyr	Leu	Leu
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Cys	Tyr	Ser	Ala	Gly	Val	Phe	His	Leu	His	Gln	Gly	Asp	Ile	Leu
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Ser	Val	Ile	Ile	Pro	Arg	Ala	Arg	Ala	Lys	Leu	Asn	Leu	Ser	Pro
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<211> 2849

<212> DNA

<213> Homo Sapien

<400> 77

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 ctgatccaga ccccttctgc cccactgcc ctcattccagg cctctgacca 2250
 gtagcctgag aggggctttt tctaggcttc agagcagggg agagctggaa 2300
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<210> 78

<211> 281

<212> PRT

<213> Homo Sapien

<400> 78

Met	Gly	Ser	Arg	Gly	Gln	Gly	Leu	Leu	Leu	Ala	Tyr	Cys	Leu	Leu
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Leu	Ala	Phe	Ala	Ser	Gly	Leu	Val	Leu	Ser	Arg	Val	Pro	His	Val
				20					25					30
Gln	Gly	Glu	Gln	Gln	Glu	Trp	Glu	Gly	Thr	Glu	Glu	Leu	Pro	Ser
				35					40					45
Pro	Pro	Asp	His	Ala	Glu	Arg	Ala	Glu	Glu	Gln	His	Glu	Lys	Tyr
				50					55					60
Arg	Pro	Ser	Gln	Asp	Gln	Gly	Leu	Pro	Ala	Ser	Arg	Cys	Leu	Arg
				65					70					75
Cys	Cys	Asp	Pro	Gly	Thr	Ser	Met	Tyr	Pro	Ala	Thr	Ala	Val	Pro
				80					85					90
Gln	Ile	Asn	Ile	Thr	Ile	Leu	Lys	Gly	Glu	Lys	Gly	Asp	Arg	Gly
				95					100					105
Asp	Arg	Gly	Leu	Gln	Gly	Lys	Tyr	Gly	Lys	Thr	Gly	Ser	Ala	Gly

	110	115	120
Ala Arg Gly His Thr Gly Pro Lys Gly Gln Lys Gly Ser Met Gly	125	130	135
Ala Pro Gly Glu Arg Cys Lys Ser His Tyr Ala Ala Phe Ser Val	140	145	150
Gly Arg Lys Lys Pro Met His Ser Asn His Tyr Tyr Gln Thr Val	155	160	165
Ile Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp His Phe Asn Met	170	175	180
Phe Thr Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu Tyr Phe Phe	185	190	195
Ser Leu Asn Val His Thr Trp Asn Gln Lys Glu Thr Tyr Leu His	200	205	210
Ile Met Lys Asn Glu Glu Glu Val Val Ile Leu Phe Ala Gln Val	215	220	225
Gly Asp Arg Ser Ile Met Gln Ser Gln Ser Leu Met Leu Glu Leu	230	235	240
Arg Glu Gln Asp Gln Val Trp Val Arg Leu Tyr Lys Gly Glu Arg	245	250	255
Glu Asn Ala Ile Phe Ser Glu Glu Leu Asp Thr Tyr Ile Thr Phe	260	265	270
Ser Gly Tyr Leu Val Lys His Ala Thr Glu Pro	275	280	

<210> 79

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 79

tacaggccca gtcaggacca gggg 24

<210> 80

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 80

ctgaagaagt agaggccggg cacg 24

<210> 81

<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 81
cccgggtgctt gcgctgctgt gaccccggtg cctccatgta cccgg 45

<210> 82
<211> 2284
<212> DNA
<213> Homo Sapien

<400> 82
gcggagcatc cgctgcggtc ctcgccgaga cccccgcgcg gattcgccgg 50
tccttccccgc gggcgcgaca gagctgtcct cgcacctgga tggcagcagg 100
ggcgccgggg tcctctcgac gccagagaga aatctcatca tctgtgcagc 150
cttcttaaag caaactaaga ccagagggag gattatcctt gacctttgaa 200
gacaaaaact aaactgaaat ttaaaatgtt cttcggggga gaaggagct 250
tgacttacac tttggtaata atttgcttcc tgacactaag gctgtctgct 300
agtcagaatt gcctcaaaaa gagtctagaa gatgttgtca ttgacatcca 350
gtcatctctt tctaaggga tcagaggcaa tgagcccgta tatacttcaa 400
ctcaagaaga ctgcattaat tcttgctgtt caacaaaaaa catatcaggg 450
gacaaagcat gtaacttgat gatcttcgac actcgaaaaa cagctagaca 500
acccaactgc tacctatctt tctgtcccaa cgaggaagcc tgtccattga 550
aaccagcaaa aggacttatg agttacagga taattacaga ttttccatct 600
ttgaccagaa atttgccaag ccaagagtta cccaggaag attctctctt 650
acatggccaa ttttcacaag cagtcactcc cctagcccat catcacacag 700
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tctcagcctc ccacgaccct catttctaca gtttttacac gggctgcggc 1100
tacactccaa gcaatggcta caacagcagt tctgactacc acctttcagg 1150
cacctacgga ctcgaaaggc agcttagaaa ccataccggt tacagaaatc 1200
tccaacttaa ctttgaacac agggaatgtg tataacccta ctgcactttc 1250
tatgtcaaat gtggagtctt ccactatgaa taaaactgct tcctgggaag 1300
gtagggaggc cagtccaggc agttcctccc agggcagtggt tccagaaaat 1350
cagtacggcc ttccatttga aaaatggctt cttatcgggt cctgctctt 1400
tggtgtcctg ttcttggtga taggcctcgt cctcctgggt agaatcctt 1450
cggaatcact ccgcaggaaa cgttactcaa gactggatta tttgatcaat 1500
gggatctatg tggacatcta aggatggaac tcggtgtctc ttaattcatt 1550
tagtaaccag aagcccaa at gcaatgagtt tctgctgact tgctagtctt 1600
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gttttatggt tggtttttga gaaggaatga agtggaacc aaattaggta 2000
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aaagtaataa agtataattg ccatataaat ttcaaaattc aactggcttt 2100
tatgcaaaga aacaggttag gacatctagg ttccaattca ttcacattct 2150
tggttcaga taaaatcaac tgtttatatc aatttcta at ggatttgctt 2200
ttctttttat atggattcct ttaaaactta ttccagatgt agttccttcc 2250
aattaaatat ttgaataaat cttttgttac tcaa 2284

<210> 83

<211> 431

<212> PRT

<213> Homo Sapien

<400> 83

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Ile	Cys	Phe	Leu	Thr	Leu	Arg	Leu	Ser	Ala	Ser	Gln	Asn	Cys	Leu	
				20					25					30	
Lys	Lys	Ser	Leu	Glu	Asp	Val	Val	Ile	Asp	Ile	Gln	Ser	Ser	Leu	
				35					40					45	
Ser	Lys	Gly	Ile	Arg	Gly	Asn	Glu	Pro	Val	Tyr	Thr	Ser	Thr	Gln	
				50					55					60	
Glu	Asp	Cys	Ile	Asn	Ser	Cys	Cys	Ser	Thr	Lys	Asn	Ile	Ser	Gly	
				65					70					75	
Asp	Lys	Ala	Cys	Asn	Leu	Met	Ile	Phe	Asp	Thr	Arg	Lys	Thr	Ala	
				80					85					90	
Arg	Gln	Pro	Asn	Cys	Tyr	Leu	Phe	Phe	Cys	Pro	Asn	Glu	Glu	Ala	
				95					100					105	
Cys	Pro	Leu	Lys	Pro	Ala	Lys	Gly	Leu	Met	Ser	Tyr	Arg	Ile	Ile	
				110					115					120	
Thr	Asp	Phe	Pro	Ser	Leu	Thr	Arg	Asn	Leu	Pro	Ser	Gln	Glu	Leu	
				125					130					135	
Pro	Gln	Glu	Asp	Ser	Leu	Leu	His	Gly	Gln	Phe	Ser	Gln	Ala	Val	
				140					145					150	
Thr	Pro	Leu	Ala	His	His	His	Thr	Asp	Tyr	Ser	Lys	Pro	Thr	Asp	
				155					160					165	
Ile	Ser	Trp	Arg	Asp	Thr	Leu	Ser	Gln	Lys	Phe	Gly	Ser	Ser	Asp	
				170					175					180	
His	Leu	Glu	Lys	Leu	Phe	Lys	Met	Asp	Glu	Ala	Ser	Ala	Gln	Leu	
				185					190					195	
Leu	Ala	Tyr	Lys	Glu	Lys	Gly	His	Ser	Gln	Ser	Ser	Gln	Phe	Ser	
				200					205					210	
Ser	Asp	Gln	Glu	Ile	Ala	His	Leu	Leu	Pro	Glu	Asn	Val	Ser	Ala	
				215					220					225	
Leu	Pro	Ala	Thr	Val	Ala	Val	Ala	Ser	Pro	His	Thr	Thr	Ser	Ala	
				230					235					240	
Thr	Pro	Lys	Pro	Ala	Thr	Leu	Leu	Pro	Thr	Asn	Ala	Ser	Val	Thr	
				245					250					255	
Pro	Ser	Gly	Thr	Ser	Gln	Pro	Gln	Leu	Ala	Thr	Thr	Ala	Pro	Pro	
				260					265					270	
Val	Thr	Thr	Val	Thr	Ser	Gln	Pro	Pro	Thr	Thr	Leu	Ile	Ser	Thr	
				275					280					285	
Val	Phe	Thr	Arg	Ala	Ala	Ala	Thr	Leu	Gln	Ala	Met	Ala	Thr	Thr	
				290					295					300	
Ala	Val	Leu	Thr	Thr	Thr	Phe	Gln	Ala	Pro	Thr	Asp	Ser	Lys	Gly	

305	310	315
Ser Leu Glu Thr Ile Pro Phe Thr Glu	Ile Ser Asn Leu Thr Leu	
320	325	330
Asn Thr Gly Asn Val Tyr Asn Pro Thr	Ala Leu Ser Met Ser Asn	
335	340	345
Val Glu Ser Ser Thr Met Asn Lys Thr	Ala Ser Trp Glu Gly Arg	
350	355	360
Glu Ala Ser Pro Gly Ser Ser Ser Gln	Gly Ser Val Pro Glu Asn	
365	370	375
Gln Tyr Gly Leu Pro Phe Glu Lys Trp	Leu Leu Ile Gly Ser Leu	
380	385	390
Leu Phe Gly Val Leu Phe Leu Val Ile	Gly Leu Val Leu Leu Gly	
395	400	405
Arg Ile Leu Ser Glu Ser Leu Arg Arg	Lys Arg Tyr Ser Arg Leu	
410	415	420
Asp Tyr Leu Ile Asn Gly Ile Tyr Val	Asp Ile	
425	430	

<210> 84

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 84

aggaggatt atccttgacc tttgaagacc 30

<210> 85

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 85

gaagcaagtg cccagctc 18

<210> 86

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 86

cgggtccctg ctctttgg 18

<210> 87
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 87
caccgtagct gggagcgcac tcac 24

<210> 88
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 88
agtgttaagtc aagctccc 18

<210> 89
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 89
gcttctgac actaaggctg tctgctagtc agaattgcct caaaaagag 49

<210> 90
<211> 957
<212> DNA
<213> Homo Sapien

<400> 90
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gtcttcgcct ccttgtgtgc ctggtattcg gggtagctgc tcgcagagct 100
cattccagat gcacccctgt ccagtgtgc ctatagcatc cgcagcatcg 150
gggagaggcc tgtcctcaaa gctccagtc caaaaggca aaaatgtgac 200
cactggactc cctgcccac tgacacctat gcctacaggt tactcagcgg 250
agggtggcaga agcaagtacg ccaaaatctg ctttgaggat aacctactta 300
tgggagaaca gctgggaaat gttgccagag gaataaacat tgccattgtc 350
aactatgtaa ctgggaatgt gacagcaaca cgatgttttg atatgtatga 400
aggcgataac tctggaccga tgacaaagtt tattcagagt gctgctccaa 450
aatccctgct cttcatggtg acctatgacg acggaagcac aagactgaat 500

aacgatgcc aagaatgccat agaagcactt ggaagtaaag aaatcaggaa 550
catgaaattc aggtctagct gggatatttat tgcagcaaaa ggcttggaaac 600
tcccttccga aattcagaga gaaaagatca accactctga tgctaagaac 650
aacagatatt ctggctggcc tgcagagatc cagatagaag gctgcatacc 700
caaagaacga agctgacact gcagggtcct gagtaaagt gttctgtata 750
aacaatgca gctggaatcg ctcaagaatc ttatttttct aaatccaaca 800
gccccatatt gatgagtatt ttgggtttgt tgtaaacc aaacatttg 850
ctagtgtgat caaatcttgg tacgcagtat ttttatacca gtattttatg 900
tagtgaagat gtcaattagc aggaaactaa aatgaatgga aattcttaaa 950
aaaaaaa 957

<210> 91
<211> 235
<212> PRT
<213> Homo Sapien

<400> 91
Met Arg Pro Leu Ala Gly Gly Leu Leu Lys Val Val Phe Val Val
1 5 10 15
Phe Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu
20 25 30
Leu Ile Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg
35 40 45
Ser Ile Gly Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg
50 55 60
Gln Lys Cys Asp His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala
65 70 75
Tyr Arg Leu Leu Ser Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile
80 85 90
Cys Phe Glu Asp Asn Leu Leu Met Gly Glu Gln Leu Gly Asn Val
95 100 105
Ala Arg Gly Ile Asn Ile Ala Ile Val Asn Tyr Val Thr Gly Asn
110 115 120
Val Thr Ala Thr Arg Cys Phe Asp Met Tyr Glu Gly Asp Asn Ser
125 130 135
Gly Pro Met Thr Lys Phe Ile Gln Ser Ala Ala Pro Lys Ser Leu
140 145 150
Leu Phe Met Val Thr Tyr Asp Asp Gly Ser Thr Arg Leu Asn Asn
155 160 165

Asp	Ala	Lys	Asn	Ala	Ile	Glu	Ala	Leu	Gly	Ser	Lys	Glu	Ile	Arg
				170					175					180
Asn	Met	Lys	Phe	Arg	Ser	Ser	Trp	Val	Phe	Ile	Ala	Ala	Lys	Gly
				185					190					195
Leu	Glu	Leu	Pro	Ser	Glu	Ile	Gln	Arg	Glu	Lys	Ile	Asn	His	Ser
				200					205					210
Asp	Ala	Lys	Asn	Asn	Arg	Tyr	Ser	Gly	Trp	Pro	Ala	Glu	Ile	Gln
				215					220					225
Ile	Glu	Gly	Cys	Ile	Pro	Lys	Glu	Arg	Ser					
				230					235					

<210> 92

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 92

aatgtgacca ctggactccc 20

<210> 93

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 93

aggcttgga ctccttc 18

<210> 94

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 94

aagattcttg agcgattcca gctg 24

<210> 95

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 95

aatccctgct cttcatggtg acctatgacg acggaagcac aagactg 47

<210> 96
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 96
 ctcaagaagc acgcgtactg c 21

 <210> 97
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 97
 ccaacctcag cttccgcctc tacga 25

 <210> 98
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 98
 catccaggct cgccactg 18

 <210> 99
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 99
 tggcaaggaa tgggaacagt 20

 <210> 100
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 100
 atgctgccag acctgatcgc agaca 25

 <210> 101
 <211> 19
 <212> DNA

<213> Artificial Sequence
 <220>
 <223> Synthetic oligonucleotide probe
 <400> 101
 gggcagaaat ccagccact 19
 <210> 102
 <211> 18
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 <223> Synthetic oligonucleotide probe
 <400> 102
 cccttcgcct gcttttga 18
 <210> 103
 <211> 27
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic oligonucleotide probe
 <400> 103
 gccatctaatt tgaagcccat cttccca 27
 <210> 104
 <211> 19
 <212> DNA
 <213> Artificial Sequence
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 <223> Synthetic oligonucleotide probe
 <400> 104
 ctggcgggtgt cctctcctt 19
 <210> 105
 <211> 21
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic oligonucleotide probe
 <400> 105
 cctcgggtctc ctcattctgtg a 21
 <210> 106
 <211> 20
 <212> DNA
 <213> Artificial Sequence
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<223> Synthetic oligonucleotide probe

<400> 106

tggcccagct gacgagccct 20

<210> 107

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 107

ctcataggca ctcggttctg g 21

<210> 108

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 108

tggctcccag cttggaaga 19

<210> 109

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 109

cagctcttgg ctgtctccag tatgtaccca 30

<210> 110

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

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<210> 111

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 111

ggattctaatt acgactcact atagggctgg ccgcaacccc ttcaactg 48

<210> 112

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 112

ctatgaaatt aaccctcact aaagggaccg cagctgggtg accgtgta 48

<210> 113

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 113

ggattctaatt acgactcact atagggccgc cccgccacct cct 43

<210> 114

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 114

ctatgaaatt aaccctcact aaagggactc gagacaccac ctgaccca 48

<210> 115

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 115

ggattctaatt acgactcact atagggccca aggaaggcag gagactct 48

<210> 116

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide probe

<400> 116

ctatgaaatt aaccctcact aaagggacta ggggggtggga atgaaaag 48

<210> 117

<211> 48
 <212> DNA
 <213> Artificial Sequence

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 <223> Synthetic oligonucleotide probe

 <400> 117
 ggattctaatacgcactcactatagggccccctcgagctctcccgtgta 48

 <210> 118
 <211> 48
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 118
 ctatgaaattaacctcactaaagggaggctcgccactggtcgtaga 48

 <210> 119
 <211> 48
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 119
 ggattctaatacgcactcactatagggcaaggagccgggacccaggaga 48

 <210> 120
 <211> 47
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 120
 ctatgaaattaacctcactaaagggagggggcccttggtgctgagt 47